

WHAT IS CLAIMED IS:

1. An image processing apparatus for supplying an image forming apparatus with image data that has been performed halftoning process by using a threshold mask  
5 which is corrected based on an output characteristic of the image forming apparatus, comprising:

output characteristic detection means for detecting the output characteristic from results output by the image forming apparatus;

10 mask generating means for generating the threshold mask, which is used in the halftoning process, by correcting a threshold mask based upon the output characteristic detected;

supplying means for subjecting image data output to  
15 the image forming apparatus to the halftoning processing using the generated threshold mask, and supplying the image forming apparatus with the image data after the halftoning process thereof; and

wherein the mask generating means generates the  
20 threshold mask by using potential weighted by the output characteristic detected by the output characteristic detection means.

2. The apparatus according to claim 1, wherein said image forming apparatus has a plurality of print  
25 elements and the output characteristic is an average density variation from one of said plurality of print

elements to the next.

3. The apparatus according to claim 1, wherein said image forming apparatus has a plurality of print elements and the output characteristic is an amount of printing position deviation from one of said plurality of print elements to the next.

4. The apparatus according to claim 1, wherein said output characteristic detection means includes:

image reading means for reading results output by the image forming apparatus; and

density detection means for detecting line-by-line average pixel density from results output by said image reading means.

5. The apparatus according to claim 1, wherein said mask generating means generates the mask using potential that has been weighted by the line-by-line average pixel density.

6. The apparatus according to claim 1, wherein said output characteristic detection means includes:

image reading means for results output by the image forming apparatus;

density detection means for detecting, from results output by said image reading means, a line for which average pixel density exceeds a predetermined value; and

barycenter detection means for detecting a barycenter of a line for which the average pixel density

exceeds the predetermined value.

7. The apparatus according to claim 6, wherein said mask generating means generates the mask using potential that has been weighted by the barycenter of the line.

5 8. An image forming system comprising the image processing apparatus set forth in claim 1, and an image forming apparatus.

9. An image processing method for supplying an image forming apparatus with image data that has been  
10 performed halftoning process by using a threshold mask which is corrected based on an output characteristic of the image forming apparatus, comprising:

an output characteristic detection step for detecting the output characteristic from results output  
15 by the image forming apparatus;

a mask generating step for generating the threshold mask, which is used in the halftoning process, by correcting a threshold mask based upon the output characteristic detected;

20 a supplying step for subjecting image data output to the image forming apparatus to the halftoning processing using the generated threshold mask, and supplying the image forming apparatus with the image data after the halftoning process thereof; and

25 wherein the mask generating step generating the threshold mask by using potential weighted by the output

characteristic detected by the output characteristic detection step.

10. The method according to claim 9, wherein said image forming apparatus has a plurality of print elements and  
5 the output characteristic is an average density variation from one of said plurality of print elements to the next.

11. The method according to claim 9, wherein said image forming apparatus has a plurality of print elements and  
10 the output characteristic is an amount of printing position deviation from one of said plurality of print elements to the next.

12. The method according to claim 9, wherein said output characteristic detection step includes:  
15 an image reading step of reading results output by the image forming apparatus; and  
a density detection step of detecting line-by-line average pixel density from results output by said image reading means.

20 13. The method according to claim 12, wherein said mask generating step generates the mask using potential that has been weighted by the line-by-line average pixel density.

14. The method according to claim 9, wherein said  
25 output characteristic detection step includes:  
an image reading step of results output by the

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image forming apparatus;

a density detection step of detecting, from results output by said image reading means, a line for which average pixel density exceeds a predetermined value; and

5 a barycenter detection step of detecting a barycenter of a line for which the average pixel density exceeds the predetermined value.

15. The method according to claim 14, wherein said mask generating step generates the mask using potential that  
10 has been weighted by the barycenter of the line.

16. A storage medium storing a program capable of being executed by a computer, wherein the computer which executes said program is made to function as the image processing apparatus set forth in claim 1.

15 17. A storage medium storing the image forming method, which is set forth in claim 9, as a program capable of being executed by a computer.